# PROPOSED REJECTION OF NINE SPECIFIC NAMES OF HOLOTHURIOIDEA (ECHINODERMATA). Z.N.(S.) 1587

By Ailsa M. Clark (*British Museum* (*Natural History*), *London*)

It is proposed that the names in the left-hand column below should be suppressed in order that the better-known names (of which they are, or could be, senior synonyms) on the right should not be invalidated.

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| (1) *Holothuria guamensis* Quoy & Gaimard, 1833 | *Microthele nobilis* (Selenka), 1867 |
| (2) *Holothuria lucifuga* Quoy & Gaimard, 1833 | *Holothuria moebii* Ludwig, 1883 |
| (3) *Holothuria albifasciata* Quoy & Gaimard, 1833 | ?*Holothuria coluber* (Semper), 1868* |
| (4) *Holothuria lutea* Quoy & Gaimard, 1833 | ?*Stichopus variegatus* Semper, 1868* |
| (5) *Holothuria pentagona* Quoy & Gaimard, 1833 | *Pentacta australis* (Ludwig), 1875 |
| (6) *Fistularia fusca* Quoy & Gaimard, 1833 | *Polycheira rufescens* Brandt, 1835 |
| (7) *Stichopus leucospilota* Brandt, 1835 | *Holothuria vagabunda* Selenka, 1867 |
| (8) *Thyone buccalis* Stimpson, 1856 | *Stolus sacellus* Selenka, 1867 |
| (9) *Holothuria timama* Lesson, 1830 | *Holothuria aculeata* (Semper), 1868 |

The six specific names of Quoy & Gaimard were discussed by Cherbonnier (1952) who decided that *Holothuria albifasciata* and *lutea* were possibly synonymous with *Holothuria coluber* and *Stichopus variegatus* respectively while the four other species were definitely synonymous with those listed opposite. Similarly in 1951 Cherbonnier recognised *Holothuria timama* Lesson as synonymous with *H. aculeata* (Semper).

The two remaining names in the left-hand column, *Stichopus leucospilota* Brandt and *Thyone buccalis* were earlier recognised as conspecific with *H. vagabunda* and *Stolus sacellus* respectively but their priority has been deliberately ignored by most specialists in favour of the better known names. For instance Panning (1929–35) in his monograph on the genus *Holothuria* (sensu lato) used the six names in the right-hand column which came within the scope of his work, while Cherbonnier (1955) used *H. vagabunda* with *leucospilota* listed among the references and similarly used *Microthele nobilis* rather than *guamensis*. Heding too (1934 and 1940) used the name *vagabunda.*

**1.** *Holothuria guamensis* Quoy & Gaimard, 1833, p. 137.

The type-specimen seems to be lost.

Apart from simple repetitions of the original record, *H. guamensis* has only been mentioned by Lampert (1855), who notes only that the short description makes placing it impossible, Théel (1886), who notes that " it is a

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* The question marks signify that in the view of Cherbonnier (1952) these two names are only possibly synonyms of the two on the left.

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very dubious form, which needs re-examination ", Panning (1929) in his monograph on *Holothuria* (in the wide sense) [which is still the definitive work], who lists *guamensis* among the unrecognisable species, and by Cherbonnier (1952), who reproduces Quoy and Gaimard's figure and their short description, which includes only two characters of taxonomic importance, the colour and the number of tentacles (26). Although the latter is four more than has been recorded for *Microthele nobilis* (Selenka), 1867. Cherbonnier believes that the distinctive colour pattern identifies *guamensis* with *nobilis* out of the four possible species which occur at the type locality, Guam.

Notwithstanding this statement, in 1955 Cherbonnier used the name *Microthele nobilis* as a heading with the reference to *H. guamensis* among those listed below it.

The specific name *nobilis* (in combination with various generic names such as *Mülleria*, *Actinopyga* and *Holothuria* (*Microthele*)) was used for additional material by Semper (1868), Théel (1886), Fisher (1907), Panning (1929) and following authors, including Heding and H. L. Clark, but not Domantay.

In 1881 Ludwig had shown that *Mülleria nobilis* Selenka, 1867 is synonymous with *Holothuria maculata* Brandt, 1835 (not *H. maculata* Chamisso and Eysenhardt, 1821) and the name *maculata* was used by several authors between 1881 and 1929 (notably Lampert, Mitsukuri, Erwe, Bedford, and Pearson) as well as by Domantay since 1929 despite the fact that it is a junior homonym.

2, 3 and 4. *Holothuria lucifuga*, *albifasciata* and *lutea* Quoy & Gaimard, 1833, pp. 134, 132 and 140 respectively.

All three were referred to the genus *Stichopus* by Brandt (1835) followed by Selenka (1867), Semper (1868), Lampert (1885), Théel (1886) and Panning (1929), none of whom added any new records. However, H. L. Clark (1922) in his revision of *Stichopus* noted that *lucifugus* is unidentifiable but might represent the same species as *Holothuria pulchella* Selenka, that *albifasciatus* is simply unidentifiable and that *luteus* is unidentifiable but is more likely to be synonymous with *Stichopus variegatus* than with *S. horrens*.

Cherbonnier (1952) found that the type of *lucifuga* still exists in the Paris Museum and is conspecific with *Holothuria moebii* Ludwig, 1883, which name has been widely used for additional material (either as a species or as a subspecies of *H. lubrica*) notably by Lampert, Théel, Mitsukuri, Ohshima, Panning and Chang. The types of *H. albifasciata* and *lutea* are lost. Concerning *albifasciata*, Cherbonnier notes that it is possibly synonymous with *Halodeima coluber* (Semper), 1868, while *lutea* he says is possibly a synonym of *Stichopus variegatus* Semper, 1868. Both *H. coluber* and *S. variegatus* have been recorded a number of times in the literature, notably by H. L. Clark and Panning.

5. *Holothuria pentagona* Quoy & Gaimard, 1833, p. 135.

Since its inception the name *pentagona* has been mentioned by Brandt (1835), who placed it in the genus *Stichopus* and by Semper (1868), who considered it to be a synonym of *Colochirus tuberculosus* (Quoy & Gaimard), 1833, p. 131. Semper was followed by Lampert (1885), Théel (1886) and other workers, though, H. L. Clark (1922) commented simply that *pentagona* is a *Pentacta* (of which he considered *Colochirus* is a synonym).

Cherbonnier (1952) re-examined the type specimen and declared that it is conspecific with *Colochirus australis* Ludwig, 1875 (of which the type-locality was similarly Sydney, N.S.W.).

The name *Colochirus australis* was referred by Ludwig himself (1887) to the synonymy of the South African species *Actinia doliolum* Pallas, 1766. The following authors including Erwe (1913), Ekman (1918) and Cotton and Godfrey (1942) used the name *Colochirus doliolum* (Pallas) for the Australian species but H. L. Clark (1932) recognised *australis* as distinct. Again in his monographs on the Echinoderms of Australia (1938 and 1946) H. L. Clark used the name *Pentacta australis* (Ludwig). This was followed by Panning (1949), though maintaining the old generic name *Colochirus*, and by Hickman (1962) who uses *Pentacta australis*.

Except for the original reference (with that of Brandt) and Cherbonnier's redescription, the name *pentagona* has never been used.

Since this common south Australian species has already undergone one change of name it is undesirable to subject it to another.

6. *Fistularia fusca* Quoy & Gaimard, 1833, p. 126.

The name *fusca* was referred to by Brandt (1835) who transferred it to *Chiridota*, followed by Dujardin & Hupé (1862), Selenka (1867), who transferred it to *Synapta* followed by Semper (1868), Lampert (1885) and Théel (1886), while H. L. Clark (1907) noted that it might belong to *Euapta* (or to *Opheodesoma*, *Polyplectana*, *Synapta* or *Synaptula*).

By none of these workers was any additional material ascribed to *fusca*.

Cherbonnier (1952) redescribed the type-specimen of *fusca* and found it to be conspecific with *Polycheira rufescens* Brandt, 1835. Since 1881, when Ludwig re-examined Brandt's type of *rufescens* and stated that *Chiridota variabilis* Semper, 1868 is a synonym of it, the name *rufescens* has been widely used for additional material of the species, notably by H. L. Clark, Ohshima and Heding.

7. *Stichopus* (*Gymnochirota*) *leucospilota* Brandt, 1835, p. 251.

The name *leucospilota* has been mentioned by Selenka (1867) under the generic name *Stichopus* and by Semper (1868) as *?Stichopus leucospilota*. Ludwig (1881) re-examined the type-specimen and declared that it is conspecific with *Holothuria vagabunda* Selenka, 1867. Notwithstanding this, Ludwig himself persisted in using the name *vagabunda* (1882, 1883, 1888, etc.) and Lampert (1885) stated that although he was well aware that the use of *vagabunda* offended against the prior rights of *leucospilota*, the excellent name *vagabunda* has become so well established that its rival *leucospilota* could not drive it out. Consequently the name *vagabunda* continued to be used, notably by Théel, Sluiter, Koehler and Vaney, Pearson, Fisher, Erwe and Ekman until H. L. Clark (1920) re-stated that *leucospilota* " must unquestionably take " priority and used it instead of *vagabunda* ; this he did again in 1921, 1922, 1932, 1938 and 1946. H. L. Clark's usage was followed by Deichmann, by several Australian workers not specialists on echinoderms, by Utinomi (1959), Tortonese (1955), and by Cherbonnier in a single paper of 1955.

Otherwise the recent holothurian specialists have all kept to the name *vagabunda*, notably Panning, Heding and Cherbonnier in other papers up to the present day.

8. *Thyone buccalis* Stimpson, 1856.

The type-locality of *buccalis* is Port Jackson, N.S.W.

Since its inception, the name *buccalis* has been used by Semper (1868), for additional Australian material, Lampert (1885), who quoted the earlier records only, Théel (1886), who described some of Semper's specimens, Bell (1884) and H. L. Clark (1921), who referred to it additional Australian material. However, Théel's comment that *buccalis* may possibly be proved to be identical with *Thyone sacella* (Selenka), 1867, was repeated by H. L. Clark (1938), who in 1946 gave *Stolus sacellus* as a synonym. This was followed by Domantay (1962), although Panning (1949) had referred *buccalis* to a new genus *Pseudothyone* leaving *Stolus sacellus* as a distinct species.

*Stolus sacellus* Selenka, 1867, is the type-species of the genus *Stolus* and its type locality is Zanzibar.

The name has been used by Semper (1868), von Marenzeller (1882), Lampert (1885), Théel (1886), Studer (1889), Sluiter (1895), Pearson (1902), Vaney (1905), Mitsukuri (1912), Erwe (1913), H. L. Clark (1932), Panning (1949) and Cherbonnier (1955), most of them for additional material.

Cherbonnier (MS) agrees that *buccalis* and *sacellus* are synonymous (despite Panning's inclusion of them in different genera) but prefers the latter name despite its lack of priority, because it has been used so much more than *buccalis* by holothurian specialists.

9. *Holothuria timama* Lesson, 1830, p. 118.

Since its inception, the name *timama* has been used by Jaeger (1833) who referred it to the genus *Psolus* followed by Dujardin and Hupé (1862), but Semper (1868) put it (with a query) in the synonymy of *Holothuria marmorata* Jaeger, 1833, as did Lampert (1885), though giving it the heading of *Holothuria timama*. Théel (1886) lists it among the "incompletely known" species needing re-examination; this was repeated by Panning (1929) who spelled the name *timana*.

Finally Cherbonnier (1951) redescribed Lesson's type-specimen (also under the name *timana*) and declared that it is conspecific with *Holothuria aculeata* Semper, 1868, which name has been used by Lampert (1885), Théel (1886), Hérouard (1893), Lampert (1896), Pearson (1913) and Panning (1934) though without adding any additional records.

The International Commission on Zoological Nomenclature is therefore asked to preserve the accustomed terminology of the above holothurian species by taking the following action:

(1) use its plenary powers to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

- (a) *guamensis* Quoy & Gaimard, 1833, as published in the binomen *Holothuria guamensis*;
- (b) *lucifuga* Quoy & Gaimard, 1833, as published in the binomen *Holothuria lucifuga*;
- (c) *albifasciata* Quoy & Gaimard, 1833, as published in the binomen *Holothuria albifasciata*;
- (d) *lutea* Quoy & Gaimard, 1833, as published in the binomen *Holothuria lutea*;

   - (e) *pentagona* Quoy & Gaimard, 1833, as published in the binomen *Holothuria pentagona*;
   - (f) *fusca* Quoy & Gaimard, 1833, as published in the binomen *Fistularia fusca*;
   - (g) *timama* Lesson, 1830, as published in the binomen *Holothuria timama*;
   - (h) *leucospilota* Brandt, 1835, as published in the binomen *Stichopus leucospilota*;
   - (i) *buccalis* Stimpson, 1856, as published in the binomen *Thyone buccalis*;

(2) place the specific names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

(3) place the following specific names on the Official List of Specific Names in Zoology:
   - (a) *nobilis* Selenka, 1867, as published in the binomen *Mülleria nobilis*;
   - (b) *moebii* Ludwig, 1883, as published in the binomen *Holothuria moebii*;
   - (c) *coluber* Semper, 1868, as published in the binomen *Holothuria coluber*;
   - (d) *variegatus* Semper, 1868, as published in the binomen *Stichopus variegatus*;
   - (e) *australis* Ludwig, 1875, as published in the binomen *Colochirus australis*;
   - (f) *rufescens* Brandt, 1835, as published in the binomen *Polycheira rufescens*;
   - (g) *aculeata* Semper, 1868, as published in the binomen *Holothuria aculeata*;
   - (h) *vagabunda* Selenka, 1867, as published in the binomen *Holothuria vagabunda*;
   - (i) *sacellus* Selenka, 1867, as published in the binomen *Stolus sacellus*.

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